ABSTRACT

The invention concerns the manufacture of complex metallic of metallized porous structures, wherein the electroplating metal over the entire developed surface is preceded by a specific pre-metallization of the basic structure. The pre-metallization is obtained by depositing a conductive polymer, which is deposited on the entire developed surface of the structure by the steps of an oxidizing pre-treatment of the structure, depositing in the liquid phase, a monomer having a polymerized foam that is electrically conductive, and polymerizing oxidation doping of the monomer. The structures according to the invention are particularly intended for use as electrodes for the electrolysis of liquid effluents, as electrode supports for electrochemical generators, as catalyst supports, filtration media, phonic insulation, electromagnetic and nuclear protection structures, or for other applications.